03040204-030

(Little Pee Dee River)

General Description

Watershed 03040204-030 is located in Marlboro and Dillon Counties and consists primarily of the ***Little Pee Dee River*** and its tributaries from Leith Creek to Buck Swamp. The watershed occupies 107,949 acres of the Upper Coastal Plain region of South Carolina. The predominant soil types consist of an association of the Lakeland-Norfolk-Johnston series. The erodibility of the soil (K) averages 0.15; the slope of the terrain averages 4%, with a range of 0-15%. Land use/land cover in the watershed includes: 33.5% agricultural land, 24.2% forested land, 21.3% scrub/shrub land, 16.6% forested wetland (swamp), 3.9% urban land, and 0.5% water.

This section of the Little Pee Dee River accepts the drainage of its upper reach along with the Leith Creek Watershed, Carolina Branch, the Shoe Heel Watershed, and Martins Branch. Sweat Swamp (Wash Branch, Donohoe Bay, Beaverdam Creek) enters the river next, followed by Hayes Swamp (Persimmon Swamp), Ropers Mill Branch, Manning Bay, and Maple Swamp near the City of Dillon. Contrary Swamp originates in South Carolina and drains into North Carolina near Hayes Swamp. Cypress Branch drains into the Little Pee Dee River downstream of Maple Swamp together with Kelly Bay, Cane Branch (Boggy Branch), Bell Swamp Branch (Butler Branch, Long Branch, Indian Pot Branch, Poplar Branch, Little Pee Dee State Park Pond), Hayes Branch, Mile Branch, and Hards Branch. Little Pee Dee State Park is located on the river near the confluence with Cane Branch and extends over to Bell Branch Swamp. There are numerous lakes and ponds (totaling 213.5 acres) in this watershed and a total of 152.5 stream miles. Maple Swamp is classified FW* (dissolved oxygen not less than 4.0 mg/l and pH between 5.0 and 8.5), and the remaining streams in the watershed are classified FW.

Water Quality

Station #	Type	Class	Description
PD-069	P	FW	LITTLE PEE DEE RIVER AT SC 57 11.5 MILES NW DILLON
PD-029E	S	FW	LITTLE PEE DEE RIVER AT S-17-23
PD-055	S	FW	LITTLE PEE DEE RIVER AT SC 9
PD-030	S	FW*	MAPLE SWAMP AT SC 57
PD-030A	S	FW	LITTLE PEE DEE RIVER BELOW JUNCTION WITH MAPLE SWAMP
PD-348	W	FW	LITTLE PEE DEE RIVER AT S-17-72

Little Pee Dee River - There are five monitoring sites along this section of the Little Pee Dee River. This is a blackwater system, characterized by naturally low pH and dissolved oxygen concentrations. Aquatic life uses are fully supported at the furthest upstream site ***(PD-069)***; however, there is a significant increasing trend in turbidity. There was also a high concentration of zinc measured in 1996. Although pH excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. There is a significant increasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving

conditions for these parameters. P,P'DDT and P,P'DDE (metabolites of DDT) were detected in the 1994 sediment sample, P,P'DDE was detected in the 1997 sample, and P,P'DDT was detected in the 1998 sample. Although the use of DDT was banned in 1973, it is very persistent in the environment. Recreational uses are fully supported; however, there is a significant increasing trend in fecal coliform bacteria concentration.

At the next site downstream ***(PD-029E)***, aquatic life uses are fully supported; however, there is a significant increasing trend in turbidity. There is a significant increasing trend in pH. Although pH excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. A significant increasing trend in dissolved oxygen suggests improving conditions for this parameter. Recreational uses are fully supported.

Further downstream ***(PD-055)***, aquatic life uses are fully supported; however, a high concentration of zinc and a very high concentration of copper were measured in 1994, compounded by a significant increasing trend in turbidity. There is a significant increasing trend in pH. Although pH excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. A significant decreasing trend in five-day biochemical oxygen demand and total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are fully supported.

Aquatic life uses are fully supported at ***PD-030A***; however, there is a significant increasing trend in turbidity. Although pH and dissolved oxygen excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. P,P'DDT was detected in the 1994 sediment sample, a very high concentration of zinc and a very high concentration of copper were measured in the 1995 sample, and P,P'DDE was detected in the 1997 sample. Recreational uses are fully supported.

At the furthest downstream site ***(PD-348)***, aquatic life uses are fully supported. Although pH excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Recreational uses are fully supported.

Maple Swamp (PD-030) - Aquatic life uses are not supported due to dissolved oxygen excursions, compounded by a significant increasing trend in turbidity. There is a significant decreasing trend in pH. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Little Pee Dee State Park Pond - The pond has been treated with aquatic herbicides from 1989-1992 and again from 1994-1996 in an attempt to control aquatic plants and provide access for swimming and boating. The Little Pee Dee State Park pond is scheduled to be treated with aquatic herbicides again in 2000.

A fish consumption advisory has been issued by the Department for mercury and includes the Little Pee Dee River within this watershed (see advisory p.115).

NPDES Program

Active NPDES Facilities

RECEIVING STREAM *FACILITY NAME* *PERMITTED FLOW @ PIPE (MGD)* *COMMENT*	*NPDES#* *TYPE* *LIMITATION*
LITTLE PEE DEE RIVER CITY OF DILLON PIPE #: 001 FLOW: 5-10 WQL FOR DO,TRC,NH3N,BOD5	SC0021776 MAJOR DOMESTIC WATER QUALITY
LITTLE PEE DEE RIVER TRICO/HAMER WTP PIPE #: 001 FLOW: 0.0468 WQL FOR TRC	SCG645031 MINOR DOMESTIC WATER QUALITY
LITTLE PEE DEE RIVER ANVIL KNITWEAR/DILLON DISTR CTR PIPE #:001 FLOW: M/R	SC0047511 MINOR INDUSTRIAL EFFLUENT
HAYES SWAMP SOUTH OF THE BORDER PIPE #: 001 FLOW: 0.155 WQL FOR DO,TRC,NH3N,BOD5	SC0031801 MINOR DOMESTIC WATER QUALITY
ROPERS MILL BRANCH TRICO/BOBBY BYRD WTP PIPE #: 001 FLOW: 0.0764 WQL FOR TRC	SCG645022 MINOR DOMESTIC WATER QUALITY
LONG BRANCH TRICO/BERMUDA WTP PIPE #: 001 FLOW: 0.0346 WQL FOR TRC; UNCONSTRUCTED	SCG645021 MINOR DOMESTIC WATER QUALITY

Nonpoint Source Management Program

Camp Facilities

FACILITY NAME/TYPE *RECEIVING STREAM*	*PERMIT #* *STATUS*
LITTLE PEE DEE STATE PARK/FAMILY CAMP BELL SWAMP BRANCH	17-0004 ACTIVE
BASS LAKE RV CAMPGROUND, INC./FAMILY CAMP LITTLE PEE DEE RIVER	17-0009 ACTIVE
PEDROS CAMPGROUND/FAMILY CAMP HAYES SWAMP	17-0005 ACTIVE

Land Disposal Activities

Landfill Facilities

LANDFILL NAME	*PERMIT #*
FACILITY TYPE	*STATUS*
DILLON COUNTY LANDFILL	DWP-014 (DWP-118, 171001-1202,
MUNICIPAL	CLOSED 161001-6001)
DILLON COUNTY C&D LANDFILL	171901-1301
CONSTRUCTION	----------
DILLON COUNTY INDUSTRIAL LANDFILL	171001-1601 (171001-1201)
INDUSTRIAL	CLOSED
301 FARM SHORT-TERM LANDFILL	172900-1301
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Mining Activities

MINING COMPANY	*PERMIT #*
MINE NAME	*MINERAL*
BAKER BROTHERS OF GRESHAM, INC.	0959-33
GRESHAM	SAND/CLAY
WILLARD BARKER, JR.	0955-33
MILLER	SAND/CLAY

Growth Potential

There is a moderate potential for growth in this watershed, which contains the City of Dillon. The main growth area for the watershed is the City of Dillon, with development concentrated in the downtown area, the area south of Dillon, and at two interstate interchanges (I-95/S.C. Hwy. 34 and I-95/S.C. Hwy. 9). Industrial development is extensive, mostly in the urban fringe area north of Dillon. Due to water and sewer improvements, additional growth in this industrial corridor is likely. Water service includes a moderately extensive rural system associated with the Trico Water Company and the City of Dillon. Public sewer service is more limited, serving only Dillon and the urban fringe surrounding it. The City of Dillon has undergone a wastewater treatment plant upgrade, and an expansion of sewer service is now likely.